

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A "~~frigate~~" frigate vessel-type equipment system, comprising:

~~_____ having standard equipment segments, for power generation, power distribution, propulsion and automation, and having a vessel hull (1), which is matched to the "frigate" frigate vessel-type equipment system on a size and requirement-specific basis,; and~~
~~_____ wherein the~~

~~_____ standard equipment segments, are formed from standard units and components which are arranged in accordance with the requirements in the vessel hull (1) of the "frigate" frigate vessel-type equipment system, and which can be installed installable in vessel holes hulls of different vessel-type equipment systems.~~

2. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 1, ~~in which~~ wherein the propulsion segment ~~comprises~~ includes a combination of two POD propulsion segments ~~(2, 3)~~, ~~which are preferably~~ in the form of completely electrical lightweight POD propulsion systems ~~and, preferably have a power of 6 to 8, and in particular 7 MW, and have two waterjet propulsion segments (4, 5), which are preferably in the form of twin waterjet propulsion systems and preferably have a power of 12 to 16, in particular 14 (2x7), MW.~~

3. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 1~~—or—2~~, ~~whose~~ wherein a propulsion segment includes a thruster segment ~~(6)~~, preferably a 0.5 MW bow jet thruster.
4. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 2~~—or—3~~, ~~in which~~ wherein electric motors in ~~the~~ at least one of POD propulsion segments ~~(2, 3)~~ and ~~/or in the~~ waterjet propulsion segments ~~(4, 5)~~ and ~~or in the~~ a thruster segment ~~(6)~~ are designed with windings composed of high-temperature superconductors.
5. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claims 2~~—to—4~~, ~~in which~~ ~~the~~ wherein electric motors in at least one of the POD propulsion segments, ~~(2, 3)~~ and ~~or in the~~ waterjet propulsion segments, ~~(4, 5)~~ and ~~or in the~~ thruster segment ~~(6)~~ are in the form of synchronous machines with a field winding composed of high-temperature superconductors, and with the stator windings being in the form of air-gap windings.
6. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claims 2~~—to—5~~, ~~whose~~ wherein waterjet propulsion segments ~~(4, 5)~~ are equipped with a coaxial exhaust-gas nozzle segment.
7. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claims 2~~—to—6~~, ~~in which~~ ~~—~~ wherein, in the longitudinal direction~~—~~, the distance between the center of the POD propulsion segments ~~(2, 3)~~ and the nose of the traction propeller ~~(17)~~ of the POD propulsion segment ~~(2, 3)~~ ~~on the one hand~~, and the water outlet opening of the pods of the waterjet propulsion

segments, ~~(4, 5) on the other hand~~ is approximately 25 to 35 m, ~~approximately 22 to 32 m.~~

8. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 2 to 7,~~ whose wherein the vessel hull ~~(1)~~ is structurally designed in the aft area such that it has the strength to hold the weight of the two POD propulsion segments ~~(2, 3)~~ which each, ~~for example,~~ weigh approximately 65 tonnes, as well as the associated units, ~~such as converters, controllers etc.~~ whose weight is, ~~for example,~~ approximately 20 to 30 tonnes, and to absorb the axial forces which occur as a result of the ~~operation of the~~ two POD propulsion segments ~~(2, 3)~~.
9. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 1 to 8, in~~ which wherein a the power generator segment is formed from a combination of ~~preferably four~~ fuel cell segments ~~(7, 8, 11, 12), which are preferably in the form of at least one of~~ air-breathing PEM fuel cells each having a power of approximately 4.5 MW (net) or 6 MW (gross), and ~~or preferably two generator segments (9, 10), preferably gas turbine powered generators,~~ each having a power of approximately 16 MW.
10. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 9, whose wherein a power generator segment ~~also~~ has high-power batteries by ~~means of which the fuel-cell segments (7, 8, 11, 12) can be started up.~~
11. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 9 ~~or 10,~~ whose wherein the generators ~~(9, 10)~~ have windings composed of a high-temperature superconductor.

12. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in claim 9—~~or 10~~, ~~whose~~ wherein the generators (9, 10) are in the form of synchronous machines with a field winding composed of high-temperature superconductors, with the stator windings being in the form of air-gap windings.
13. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in ~~one of claims 9 to 12~~, ~~whose~~ wherein the four air-breathing PEM fuel cells (7, 8, 11, 12) are associated, in order to supply them with hydrogen, with two diesel reformers ~~(13, 14)~~, each having a power of approximately 9 MW.
14. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in ~~one of claims 1 to 13~~, ~~whose~~ wherein a power generator segment is distributed over a number of ship protection areas SSB-1, SSB-2 and SSB-3 in the "~~frigate~~"-frigate vessel type equipment system.
15. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in claims 10—~~to 14~~, ~~in which~~ wherein a first electrical system with two air-breathing PEM fuel cells ~~(7, 8)~~ is arranged in a stern-end, first ship protection area SSB-1, ~~preferably close to the transition to a midships, second vessel protection area SSB-2.~~
16. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in ~~one of claims 9 to 15~~, ~~in which~~ wherein a second electrical system, which is subdivided into a stern-end electrical system section with two gas turbines ~~(15, 16)~~ and a bow-end electrical system section with generators ~~(9, 10)~~, is arranged in a midships, second vessel protection area SSB-2.

17. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 16, ~~in which~~ ~~the~~ wherein the stern-end ~~(15, 16)~~ electrical system section ~~(9)~~ and the bow-end electrical system section ~~(10)~~ of the second electrical system are arranged in adjacent compartments VIII, IX in the midships, second vessel protection area SSB-2.
18. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 9 to 17~~, ~~in which~~ wherein a third electrical system having two air-breathing PEM fuel cells ~~(11, 12)~~ is arranged in a third vessel protection area SSB-3, which is arranged between the second, midships vessel protection area SSB-2 and a bow-end vessel protection area SSB-4, ~~preferably close to the transition to the midships, second vessel protection area SSB-2.~~
19. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 9 to 18~~, ~~in which~~ wherein a first diesel reformer center with a diesel reformer ~~(13)~~ is arranged in the midships, second vessel protection area SSB-2, ~~preferably~~ in its compartment IX which accommodates the bow-end electrical system section ~~(9, 10)~~ of the second electrical system.
20. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 9 to 19~~, ~~in which~~ wherein a second diesel reformer center with a diesel reformer ~~(14)~~ is arranged in the third vessel protection area SSB-3, which is arranged between the midships, second vessel protection area SSB-2 and the bow-end vessel protection area SSB-4, ~~preferably close to the transition to the bow end vessel protection area SSB-4.~~

21. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 2 to 20,~~ ~~whose~~ wherein the POD propulsion segments ~~(2, 3)~~ are designed for the "~~frigate~~" frigate vessel-type equipment system to travel at a cruise speed of, ~~for example,~~ approximately 22 knots, and can be supplied with electrical power in this operating state by means of the fuel cell segments ~~(7, 8, 11, 12)~~.
22. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 2 to 21,~~ ~~whose~~ wherein waterjet propulsion segments ~~(4, 5)~~ are designed for the frigate "~~frigate~~" vessel-type equipment system to travel at a top speed of, ~~for example,~~ approximately 26 knots, and can be supplied with electrical power in this operating state by means of the two generators ~~(9, 10)~~.
23. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 2 to 22,~~ ~~whose~~ wherein waterjet propulsion segments ~~(4, 5)~~ can be supplied with electrical power from at least one fuel cell segment ~~(7, 8, 11, 12)~~ until the power limit of the fuel cell segment or segments ~~(7, 8, 11, 12)~~ is reached in order to start up these waterjet propulsion segments ~~(3, 4)~~ with low emissions.
24. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 2 to 23,~~ ~~which achieves~~ wherein speeds of more than 30 knots are achieved by operating its POD propulsion segments ~~(2, 3)~~ and ~~its~~ waterjet propulsion segments ~~(4, 5)~~ simultaneously, in which case the distribution of the electrical power which is produced by ~~means~~ way of the power generator segment can be achieved with optimized efficiency by means of the power distribution segment

and energy management for an automation carrier system vessel-~~(33)~~.

25. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in ~~one of claims 2 to 24,~~
~~whose~~ wherein a power distribution segment has a propulsion network ~~(18, 19)~~ which is fed from fuel cells and by ~~means of~~ which the POD propulsion segments ~~(2, 3)~~ can be supplied with electrical power, and has a generator-fed propulsion network ~~(21)~~, by ~~means of~~ which the waterjet propulsion segments ~~(4, 5)~~ can be supplied with electrical power.
26. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in claim 25, ~~in which~~ wherein the propulsion network ~~(18, 19)~~ which is fed from fuel cells has a stern-end network section ~~(18)~~ which is essentially associated with the stern-end, first vessel protection area SSB-1, and has a bow-end network section ~~(19)~~ which is essentially associated with the third vessel protection area SSB-3 and can be connected to the stern-end network section ~~(18)~~ via suitable coupling elements ~~(20)~~.
27. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in claim 25 ~~or 26,~~ wherein the generator-fed propulsion network ~~(21)~~ is essentially associated with the midships, second vessel protection area SSB-2 and can be connected to the propulsion network ~~(18, 19)~~, which is fed ~~by means of~~ via fuel cells, by ~~means~~ way of suitable coupling elements ~~(22, 23)~~.
28. (Currently Amended) The "~~frigate~~"-frigate vessel-type equipment system as claimed in claim 26 ~~or 27,~~ wherein an auxiliary propulsion system ~~(24)~~, which is arranged in the bow-end vessel protection area SSB-4, can

be supplied with electrical power by ~~means~~ way of the bow-end network section ~~(19)~~ of the propulsion network ~~(18, 19)~~ which is fed by ~~means~~ way of fuel cells.

29. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 25 to 28~~, in ~~which~~ wherein on-board network loads, ~~for example weapon system units (25, 26)~~, can be supplied with electrical power from the entire power generation segment, advantageously by ~~means~~ way of the propulsion network ~~(18, 19)~~ which is fed by ~~means of~~ via fuel cells.

30. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 25 to 29~~, ~~having further comprising~~ low-voltage electrical systems ~~(27, 28, 29)~~, which ~~are~~ arranged in various vessel protection areas SSB-1, SSB-2, SSB-3, ~~can be connected~~ connectable to the respectively associated propulsion network ~~(18, 21, 19)~~ and ~~can be connected~~ connectable to one another by ~~means of~~ suitable coupling elements ~~(30, 31, 32)~~.

31. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in ~~one of claims 1 to 30~~, ~~whose~~ wherein an automation segment ~~(33)~~ includes an automation center ~~(34)~~ which has a large number of terminals ~~(36)~~ and a terminal bus ~~(35)~~, and has two or more servers which are connected to the terminal bus ~~(35)~~ and to a system bus ~~(38)~~, and to which control networks ~~(39, 40, 41)~~ which are associated with different vessel protection areas SSB-1, SSB-2, SSB-3 and SSB-4 are connected.

32. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 31, ~~having including~~ a first control network ~~(39)~~ which is essentially associated with the stern-end, first vessel protection

area SSB-1 and with which the two POD propulsion segments ~~(2, 3)~~, the two fuel-cell segments ~~(7, 8)~~ which are arranged astern, the diesel reformer ~~(13)~~ which is arranged astern, and the vessel protection engineering ~~(42)~~ which is provided in the stern-end, first vessel protection area SSB-1 are associated.

33. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claim 31 ~~or 32~~, ~~having~~ including a second control network ~~(40)~~, which is essentially associated with the midships, second vessel protection area SSB-2 and with which the two generators ~~(9, 10)~~, the two waterjet propulsion segments ~~(4, 5)~~ and the vessel operating engineering ~~(43)~~, which is provided in the midships, second vessel protection area SSB-2, are associated.

34. (Currently Amended) The "~~frigate~~" frigate vessel-type equipment system as claimed in claims 31 ~~to 33~~, ~~having~~ including a third control network ~~(41)~~, which is essentially associated with the third vessel protection area SSB-3 and the bow-end vessel protection area SSB-4 and with which the two fuel cell segments ~~(11, 12)~~ which is arranged in the bow, the diesel reformer ~~(14)~~, which are arranged in the bow, the thruster ~~segment~~ ~~(6)~~ and the vessel operating engineering ~~(44)~~ which is provided in the third vessel protection area SSB-3 and in the bow-end vessel protection area SSB-4 are associated.

35. (New) The frigate vessel-type equipment system as claimed in claim 1, wherein a propulsion segment includes a 0.5 MW bow jet thruster.

36. (New) The frigate vessel-type equipment system as claimed in claim 2, wherein a propulsion segment includes a thruster segment.

37. (New) The frigate vessel-type equipment system as claimed in claim 3, wherein electric motors in at least one of POD propulsion segments, waterjet propulsion segments and a thruster segment are designed with windings composed of high-temperature superconductors.